Amendments to the Abstract:

Please replace the Abstract on page 22 with the following amended Abstract:

ABSTRACT

A method and apparatus for superword register value numbering includes hashing an operation code and the value numbers of a plurality of sources to generate a first hash value. The method and apparatus further includes retrieving an operation value number from the first hash table based on the first hash value. The method and apparatus further includes generating a result value number based on a previous bit hash value and the operation value number. The result value number is a combination of the operation value numbers for each component having a live indicator (e.g., a false write mask value) and a previous value numbers for the components without the live indicator (e.g., a true write mask value). Thereupon, the method and apparatus includes searching a second hash table using the result value number. As such, the method and apparatus provides using two separate hash tables for value numbering with superword instructions.